

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please replace the paragraph at page 1, lines 4-7, with the following:

The present invention relates to an immobilized enzyme in which (S)-hydroxynitrile lyase is immobilized in an immobilization carrier with a high absorption ratio (or adsorption ratio), a method for producing said immobilized enzyme, and a method for producing optically active cyanohydrin using said immobilized enzyme.

Please replace the paragraph at page 6, lines 9-20, with the following:

It is preferable to select carriers having an effective pore size for immobilizing enzyme adequately, since the absorption (or adsorption) amount of the enzyme depends on a pore size of a porous inorganic material carrier as described above. To be more specific, the selected pore size is 10-80 nm, preferably 10-60 nm, and most preferably 10-40 nm. Moreover, the specific surface area of the porous inorganic material is preferred to be as large as possible in order to immobilize the enzyme as much as possible, specifically, it is preferred to be more than 20m²/g. A form of the carrier used for immobilization is not specifically limited as long as it is porosity, but is preferred to be spherical in the case where the immobilized enzyme for filling-type of reaction vessel is prepared. In considering workability to separate the immobilized enzyme, or pressure drop generated when fluid passes through the packed bed type reactor, a particle size is preferred to be, but is not limited to, 10μm - 5mm, preferably 100μ - 2mm, having relatively narrow size distribution.

Please replace the paragraph at page 11, line 23, to page 12, line 9, with the following:

(S)-hydroxynitrile lyase prepared as in example 1 was immobilized in the various enzyme immobilization carriers, and the type of carrier suitable for immobilizing the enzyme was examined. Immobilization of enzyme was performed by adding 0.1g of various carriers to 0.5 ml of the (S)-hydroxynitrile lyase solution (activity: 64U/ml, 0.02M HEPES-Na buffer (pH6.0)) respectively, and agitating for 24 hours at 4°C, thereby allowing absorption and immobilization of the enzyme protein in each carrier. Then, the absorption ratio of the enzyme protein in the carrier was examined. The absorption ratio of the enzyme protein in the carrier was calculated by measuring a remaining (S)-hydroxynitrile lyase activity (residual activity) in a supernatant liquid after ~~immobilization~~ immobilization and (S)-hydroxynitrile lyase activity (control activity) in a control (an enzyme mixture without the carrier), and substituting the measured values into the following formula. The results are shown in Table 1. Enzyme activity was calculated by measuring at a wavelength of 249.6 nm changes in ~~adsorbance~~ absorbance of light when DL-Mandelonitrile as a substrate is decomposed by the enzyme to generate benzaldehyde. One unit (U) of activity was defined as equivalent to the generation of 1 μ mol of benzaldehyde per minute.